

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALAN N. SCHWARTZ
and THOMAS D. THEISEN

Appeal No. 98-2031
Application 08/794,154¹

ON BRIEF

MAILED

MAR 29 1997

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before FRANKFORT, STAAB and NASE, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 2, 37, 38, 40, 41, 50 and 58 through 65, which are all of the claims remaining in this application. Claims 3 through 36, 39, 42 through 49 and 51 through 57 have been canceled.

¹ Application for patent filed February 3, 1997. According to appellants, this Application is a continuation of Application 08/377,257, filed January 23, 1995.

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Appellants' invention relates to goggles, such as those that may be used for swimming or otherwise for isolation of the eyes of a user from the outside environment. As noted on page 3 of the specification, lines 5-10, the invention more specifically addresses goggles having a sealing pad associated with the frame of the goggles to form a substantially airtight seal between the frame and the user's face adjacent the sealing pad. The sealing pad is indicated as including a compliant and resiliently deformable gelatinous elastomer which forms the airtight seal to the user's face under slight to moderate pressure. Independent claims 1 and 37 are representative of the subject matter on appeal and a copy of those claims, as they appear in the Appendix to appellants' brief, is attached to this decision.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Nishiyama	5,093,940	Mar. 10, 1992
Runckel	5,331,691	July 26, 1994
Chen	5,334,646	Aug. 2, 1994

Claims 1, 2, 37, 38, 40, 41, 50, 58 through 60, 64 and 65 stand rejected under 35 U.S.C. § 103 as being unpatentable over Runckel in view of Chen.

Claims 61 through 63 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nishiyama in view of Chen.

Claim 37 additionally stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention. In the examiner's view (answer, page 6),

Claim 37 contains the trademark/trade name "Kitecko Ultrasound Standoff Pad". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). Thus claim 37 stands as not complying with 35 U.S.C. 112, second paragraph. Note that the claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

Rather than reiterate the examiner's full statement of the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellants regarding those rejections, we make reference to the examiner's answer (Paper No. 20, mailed December 30, 1997) for the examiner's complete reasoning in support of the rejections, and to appellants' brief (Paper No. 17, filed August 29, 1997) and reply brief (Paper No. 24, filed March 2, 1998) for appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review we have reached the determinations which follow.

As a preliminary matter, we note that appellants (on page 4 of their brief) have grouped claims 1, 38, 41, 58, 60, 64 and 65 together, and claims 2 and 40 together, while claims 37, 50, 59 and 61 through 63 are said to be separately patentable. Accordingly, in discussing the issues on appeal we focus particularly on representative independent claims 1 and 37, and on dependent claims 2, 50, 59 and 61 through 63.

Looking first to the examiner's rejection of claim 37 under 35 U.S.C. § 112, second paragraph, we note that appellants have made no attempt in either their brief or reply brief to respond to this ground of rejection. In light of this fact and since we agree with the examiner's position as set forth on page 6 of the answer, we will summarily sustain this rejection.

We next look to the examiner's prior art rejection of appealed claims 1, 2, 37, 38, 40, 41, 50, 58 through 60, 64 and 65 under 35 U.S.C. § 103 as being unpatentable over Runckel in view of Chen. Runckel discloses a pair of swim goggles having a frame (e.g., 14, 16, 18) including a transparent portion (14) adapted to cover at least one of the user's eyes; and a conformable pad (42) affixed to the frame. The conformable pad (42) is said to compensate for small variations between the slope of the bone (e.g., 36) and the slope of the rim of the goggles (col. 3, lines 55-59), while the goggles and pad together are intended to "seal the swimmer's eyes from the external environment without inducing a significant suction effect" (col. 1, lines 53-55). Runckel, however, says nothing concerning the material from which the conformable pad (42) is made, and thus differs from independent claims 1 and 37 on appeal in that it does not teach or suggest a sealing pad comprising "a compliant and resiliently deformable gelatinous elastomer" as is required in those claims.

Recognizing this deficiency in Runckel, the examiner has turned to Chen, relying upon this patent for its teachings of a compliant and resiliently deformable gelatinous elastomer used to make a myriad of products, such as medical and sport health care products, articles useful for noise and vibration control, and articles useful in high vacuum sealing (col. 2, lines 7-9). The examiner concludes from an evaluation of the references that it would have been obvious to one of ordinary skill in the art to construct the goggles of Runckel with the conformable sealing pad

(42) therein being formed from a gelatinous elastomer composition of the type suggested by Chen.

After reviewing the collective teachings of Runckel and Chen, we must agree with the examiner that the goggles as set forth in appellants' independent claim 1 on appeal would have been obvious to one of ordinary skill in the art at the time of appellants' invention. The principal arguments with regard to the examiner's position made by appellants are that a) Chen nowhere suggests that his material can be used as a "sealing pad" (brief, page 9), b) while Chen lists a wide variety of uses of his compliant gelatinous material with the human body, none of those uses even vaguely hints at the use as a sealing pad, and more specifically, c) that Chen does not teach or suggest the use of his elastomers in any eye-related application or as a sealing pad with human skin (brief, page 11).

While we recognize that Chen does not expressly teach the use of his compliant and resiliently deformable gelatinous elastomer as a sealing pad in the environment of an eye-related application like swimming goggles, we nonetheless are of the view that one of ordinary skill in the art familiar with the collective teachings of Runckel and Chen would have found it obvious at the time of appellants' invention to utilize the compliant, extremely soft, highly flexible gelatinous elastomer of Chen to make the conformable sealing pad (42) of Runckel. We base

this determination on our belief that one of ordinary skill in the art of goggles (like those envisioned by Runckel) would have readily understood that the compliant and resiliently deformable gelatinous elastomer of Chen would be a desirable material and an obvious choice for a cushioning/sealing pad like (42) of Runckel.

The material of Chen has numerous desirable characteristic to commend itself to the attention of the skilled artisan. Chen notes (col. 1, lines 60-62) that the gelatinous elastomer therein has high dimensional stability, excellent crack, tear, craze and creep resistance, improved tensile strength and high elongation. In addition, it is indicated that this material has "excellent processing ability for cast moulding" (col. 1, lines 67-68) and has a long service life and allows for repeated handling (col. 1, lines 64-65). Chen (col. 2, lines 1-5) notes that articles formed of the gelatinous material therein may be transparent, non-toxic, nearly tasteless and odorless, extremely soft, highly flexible, and easily hand deformable. Column 4, lines 25-36, describe the material of Chen as extremely soft and highly elastic, and as having a gel rigidity of "about 20 gram or lower to about 700 gram Bloom." Column 6, lines 23-36, describe characteristics of articles molded from the gelatinous elastomer compositions of Chen and expressly point out that

[i]n applications where low rigidity, high elongation, good compression set and excellent tensile strength are important, the instant compositions would be preferred.

Chen additionally points out (in column 6) that the compositions therein “are also useful as moulded shape articles for use in medical and sport health care” (lines 48-49) and that other uses of the compositions “may include... optical uses... and various optical devices... [and use] as a high vacuum seal” (lines 58-62). At column 7, lines 8-12, it is indicated that the elastomer compositions of Chen can be formed into any desired shape, size and thickness suitable as a cushion, and that the shaped composition can be additionally surrounded by film, fabric, foam, or any other desired material or combinations thereof. Column 7, lines 42-47, again emphasize that the compositions of Chen can be formed in any shape, and that

the original shape can be deformed into another shape (to contact a regular or irregular surface) by pressure and upon removal of the applied pressure, the composition in the deformed shape will recover back to its original shape.

Based on the foregoing, and particular on the teachings of Chen regarding the gelatinous elastomeric compositions therein being 1) used for medical and sport health care applications, 2) used as cushions associated with human body parts, 3) for optical uses and various optical devices, and 4) used as a high vacuum seal against atmospheric pressure, it is our conclusion that one of ordinary skill in the art would have found it obvious to use the compliant and resiliently deformable gelatinous elastomer of Chen in Runckel to make the cushion/seal (42) of Runckel. To the extent that sealing characteristics of the compositions of Chen with the skin of the human body may not be specifically described therein, we note that the mere recitation of what may

amount to a newly discovered function or property, inherently possessed by a structure in the prior art, does not cause a claim drawn to such structure to distinguish over the prior art. See In re Swinehart, 439 F.2d 210, 213, 169 USPQ 226, 229 (CCPA 1971).

Accordingly, the examiner's rejection of appellants' claim 1 under 35 U.S.C. § 103 based on the combined teachings of Runckel and Chen will be sustained. Further, in accordance with appellants' grouping of the claims (brief, page 4), it follows that claims 38, 41, 58, 60, 64 and 65 will fall with claim 1.

With regard to the examiner's rejection of claim 2 on appeal under 35 U.S.C. § 103, we share the examiner's view that it would have been obvious to one of ordinary skill in the art at the time of appellants' invention to select a gelatinous elastomer of Chen for use in Runckel having a degree of compliancy within the broad range set forth by appellants in claim 2. Runckel describes the pad (42) therein as being a "conformable pad," while Chen repeatedly describes the gelatinous elastomeric compositions therein as being extremely soft, highly flexible, easily hand deformable and highly elastic, with a gel rigidity of "about 20 gram or lower to about 700 gram Bloom" (col. 4, lines 25-36). Thus, it is seen that compliancy of the pad material is an important characteristic to both Runckel and Chen and would have been recognized by one of ordinary skill in the art of goggles as being a result effective variable in that art. In that regard, we note that it

is well settled that the discovery or determination of an optimum value of a result effective variable is ordinarily within the skill of the art and thus obvious. See In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and In re Boesch, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). We also observe that appellants have neither argued nor demonstrated by objective evidence that the gelatinous elastomeric compositions of Chen do not have a compliancy in the range set forth in claim 2 on appeal. Thus, the examiner's rejection of claim 2 under 35 U.S.C. § 103 is sustained. As per appellants' grouping of the claims on page 4 of their brief, it follows that claim 40 will fall with claim 2.

Looking to independent claim 37, we note that we have sustained the examiner's rejection of this claim under 35 U.S.C. § 112, second paragraph, as being indefinite. Since we have no clear idea as to exactly what composition of gelatinous elastomer is encompassed by "a synthetic polymer gel of the type used in the Kitecko Ultrasound Standoff Pad manufactured by 3M Corporation of St. Paul, Minnesota," as is required in claim 37 on appeal, we are unable to apply prior art to this claim and unable to sustain the examiner's rejection based on Runckel and Chen. Our attempt to compare the claimed subject matter with the prior art has made it apparent that considerable speculation as to the meaning of the above-quoted terminology in claim 37 and assumptions concerning the scope of the claim would be necessary in order to determine exactly what is being claimed. Since a rejection based on prior art under 35 U.S.C. § 103 should not be

grounded on such speculation and assumptions, see, e.g., In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962), we are constrained to reverse the examiner's rejection of appealed claim 37 under 35 U.S.C. § 103. This decision should not be construed in any way as a commentary on the prior art applied by the examiner. In light of the indefiniteness in this claim, we take no position on the merits of the prior art applied against claim 37.

With regard to the examiner's rejection of claims 50 and 59 on appeal, we agree with the examiner that Chen (col. 7, lines 5-17) would have been suggestive to one of ordinary skill in the art of a compliant and resiliently deformable gelatinous elastomer of the type set forth in claim 1 on appeal with a thin distortable membrane covering on the elastomer of the type required in appellants' claim 50 on appeal and of the use of such a material in Runckel for the cushioning/sealing pad (42) therein. We do not agree with the examiner that Runckel in any way would have been suggestive of an attachment means as in claim 59 on appeal, which attachment means allows removable attachment of the sealing pad to the frame. It is clear from the drawings and disclosure of Runckel that the pad (42) is affixed to the rim of the frame and is not removable therefrom. Nor do we find the examiner assertions spanning pages 5 and 6 of the answer at all helpful in this obviousness determination, since they do not appear to be applicable

to the particular factual situation presented by claim 59 on appeal. Thus, the examiner's rejection of claim 50 under 35 U.S.C. § 103 is sustained, while the examiner's rejection of claim 59 will not be sustained.

The next rejection for our consideration is that of claims 61 through 63 under 35 U.S.C. § 103 as being unpatentable over the combined teachings of Nishiyama and Chen. The examiner's statement of this rejection on page 6 of the answer makes note of the fact that claim 61 depends from independent claim 1 and thus includes all the limitations of claim 1, and yet the examiner has not rejected claim 1 on this same basis. Dependent claim 61 adds to the subject matter of claim 1 that the frame is sized to fit outside the orbits of the user's eyes, while dependent claim 62 adds to claim 1 that the frame is flexible and conforms generally to the shape of the user's face. After reviewing the collective teachings of Nishiyama and Chen, we agree with the examiner that the goggles as set forth in claims 61 and 62 on appeal would have been obvious to one of ordinary skill in the art at the time of appellants' invention.

In this regard, we are of the opinion that it would have been obvious to one of ordinary skill in the art to replace the spongy synthetic resin foam pad (41) of the goggles of Nishiyama with a pad formed of a compliant and resiliently deformable gelatinous elastomer of the type taught in Chen. We reach this conclusion for essentially the same reasons as expressed above

with regard to the combination of Runckel and Chen, except that the primary reference is now Nishiyama. As to claim 61 on appeal, we consider appellants' arguments on pages 14-15 of their brief, that the goggles of Nishiyama necessarily must fit inside the orbits of the user's eyes to be based on total speculation, since it appears to us that Nishiyama's disclosure is much broader in its scope than appellants are willing to concede. Note, for example, column 1, line 67 to column 2, line 2 of Nishiyama which discloses goggles that are conventionally not limited to being mounted inside the orbits of a user's eyes. Moreover, even if one might conclude that the lens units (10) and pads (41) of Nishiyama would be located within the orbits of a user's eyes as in Runckel, we note that the portions of the frame (20) to which the straps (50) of Nishiyama are attached would appear to provide portions of the frame that are "sized to fit outside the orbits of the user's eyes" as in appellants' claim 61 on appeal.

Concerning claim 62, we note that Nishiyama discloses (col. 4, lines 20-22) that the frame (20) therein may be made from synthetic or natural rubber, which we consider that one of ordinary skill in this art would have readily recognized as being flexible and as allowing the frame to conform generally to the shape of the user's face. Thus, we will sustain the examiner's rejection of claims 61 and 62 under 35 U.S.C. § 103.

Claim 63 depends from claim 62 and further sets forth that the frame “consists of a thin sheet of transparent material.” We find no teaching or suggestion in the references applied by the examiner of a frame that consists of a thin sheet of transparent material. Even if the tubular portion (12), lens (11) and collar portion (13) of the goggles of Nishiyama are transparent as the examiner asserts (answer, page 13), this does not establish that the frame of the goggles as defined in claims 1 and 62 on appeal “consists of a thin sheet of transparent material,” as required in appellants’ claim 63 on appeal. Accordingly, the examiner’s rejection of claim 63 under 35 U.S.C. § 103 will not be sustained.

To summarize our decision, we note that the examiner's rejection of appealed claim 37 under 35 U.S.C. § 112, second paragraph, has been affirmed. The examiner's rejection of claims 1, 2, 37, 38, 40, 41, 50, 58 through 60, 64 and 65 under 35 U.S.C. § 103 as being unpatentable over Runckel in view of Chen has been affirmed as to claims 1, 2, 38, 40, 41, 50, 58, 60, 64 and 65, but reversed with regard to claims 37 and 59. The rejection of claims 61 through 63 under 35 U.S.C. § 103 as being unpatentable over Nishiyama in view of Chen has been affirmed as to claims 61 and 62, but reversed with regard to claim 63.

The decision of the examiner is, accordingly, affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

Charles E. Frankfort
CHARLES E. FRANKFORT)
Administrative Patent Judge)

Lawrence J. Staab
LAWRENCE J. STAAB)
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Jeffrey V. Nase
JEFFREY V. NASE)
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Appeal No. 98-2031
Application 08/794,154

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Appendix

1. Goggles for isolation of a user's eyes from the outside environment comprising:

a frame including a transparent portion adapted to cover at least of the user's eyes; and

a sealing pad adjacent to the frame, said sealing pad comprising a compliant and resiliently deformable gelatinous elastomer suitable to conform under pressure to form a substantially airtight seal between the frame and at least a portion of the user's face adjacent to the sealing pad.

37. Goggles for isolation of the user's eyes from the outside environment comprising:

a frame including a transparent portion adapted to cover the user's eyes;

a sealing pad adjacent to the frame, said sealing pad comprising a compliant and resiliently deformable gelatinous elastomer suitable to conform under pressure to form a substantially airtight seal between the frame and the user's face;

wherein the gelatinous elastomer is a synthetic polymer gel of the type used in the Kitecko Ultrasound Standoff Pad manufactured by 3M Corporation of St. Paul, Minnesota;

wherein each gelatinous elastomer is sufficiently compliant that when a compressive pressure of approximately 100 grams per square inch and approximately 3500 grams per square inch is applied to the top surface of a thin strip of the gelatinous elastomer, the height of the strip can be compressed by approximately 25 percent of the height of the strip; and

further comprising a thin, distortable toroidal membrane having a smooth and regular surface which encloses the entire sealing pad in an airtight manner.